

### **III. REMARKS**

The Response under 37 C.F.R. § 1.111 previously filed on November 13, 2007 is herein incorporated by reference in its entirety except to the extent that the November 13 response is deemed to conflict with the present Supplemental Response in which case Applicants request that the Office look to the present document for Applicants' response. The present Supplemental Response is supplemental to the November 13 Response for example with respect to sections entitled "Priority" and "Rejections under 35 U.S.C. § 102".

With respect to the claims, Applicants presume that the claim amendments filed on November 13, 2007 are entered prior to submission of the present Supplemental Amendment, which Supplemental Amendment shows claim amendments relative to the claims as presented in the Response filed November 13, 2007. By the present Supplemental Amendment, claims 2, 7, 12, and 24 are currently further amended. Claims 60 and 61 have been added. Claims 1, 3-5, 9-11, 15-18, 22, 23, 27-31, and 39-59 have been cancelled. Claims 6, 8, 13, 14, 20, 21, 25, and 38 are original, and claims 19, 26, and 32-37 have been previously presented. Support for the present amendments may be found, for example, in the original claims, sequence listing and specification for example at page 30, lines 21-22.

#### **Priority**

The Office Action mailed July 11, 2007 requested that Applicants disclose the sequence identifiers in the priority applications which are identical to SEQ ID NO: 5272 of the instant application. Office Action at page 3. In their Response dated November 13, Applicants noted that sequences identical to SEQ ID NO: 5272 of the instant application were first disclosed as SEQ

ID NO: 22273 in U.S. Application No. 60/139,932, filed June 21, 1999, as SEQ ID NO: 42735 in U.S. Application No. 60/143,994, filed July 15, 1999, and as SEQ ID NO: 9911 in U.S. Application No. 60/155,422, filed September 23, 1999.

Applicants clarify that SEQ ID NO: 5272 of the instant application is identical to SEQ ID NO: 22273 of U.S. Application No. 60/139,932, filed June 21, 1999 and SEQ ID NO: 42735 of U.S. Application No. 60/143,994, filed July 15, 1999, from base pairs 2012 through 3941 of SEQ ID NO: 5272 as shown on the attached alignments. *See* Attachments A and B. SEQ ID NO: 5272 of the instant application is identical to SEQ ID NO: 9911 of U.S. Application No. 60/155,422, filed September 23, 1999, from base pairs 1 to 3941 of SEQ ID NO: 5272. *See* Attachment C.

**Rejections under 35 U.S.C. § 102:**

Claims 2, 6 to 8, 27 and 28 were rejected under 35 U.S.C. § 102(a) as allegedly being anticipated by GenBank Accession No. AP000604. Office Action at page 19. As stated in the Response dated November 13, 2007, Applicants respectfully traverse this rejection.

In their November 13 Response, Applicants stated that "... whatever else GenBank Accession Number AP000604 teaches, it does not disclose SEQ ID NO: 5272 or the complement thereof." *See* Response under 37 C.F.R. § 1.111 filed November 13, 2007 at page 18. Upon additional review, Applicants wish to clarify that GenBank Accession Number AP000604 does not teach or disclose SEQ ID NO: 5272 or a complete complement that is 100% identical over the full length of SEQ ID NO: 5272. Applicants wish to bring to the Examiner's attention the definition of "complement" set forth within the specification at page 21. Specifically, that "[t]he

nucleic acid molecules of the present invention ... also include molecules that, although capable of specifically hybridizing with the nucleic acid molecules may lack ‘complete complementarity.’” Indeed, “... molecules are said to be ‘complementary’ if they can hybridize to one another with sufficient stability to permit them to remain annealed to one another under conventional ‘high-stringency’ conditions.” *See Specification at page 10.*

Moreover, Applicants wish to bring to the Examiner’s attention that the currently amended and newly added claims do not recite or require a complete complement over 100% of the full length of SEQ ID NO: 5272. Indeed, the claims have been amended to clarify that the nucleic acid molecule comprises from about 30 to about 300 nucleotide residues of SEQ ID NO: 5272 or complements, *i.e.*, that the nucleic acid molecule comprises at least about 30 nucleotide residues from SEQ ID NO: 5272 or its complement.

In addition, Applicants note that their November 13 Response stated that “[o]ne of ordinary skill in the art would not reasonably interpret a sequence complementary to SEQ ID NO: 5272 at merely a particular segment of SEQ ID NO: 5272, as identical to for example, SEQ ID NO: 5272 or its complement....” *See Response under 37 C.F.R. § 1.111 filed November 13, 2007 at page 19.* As above, Applicants wish to clarify that one of ordinary skill in the art would not reasonably interpret a sequence complementary to SEQ ID NO: 5272 at merely a particular segment of SEQ ID NO: 5272, as identical to for example, SEQ ID NO: 5272 or its complete complement that is 100% identical over the full length of SEQ ID NO: 5272.

With respect to GenBank Accession No. AP000604 (NCBI website October 15, 1999), Applicants respectfully point out that the priority date of the captioned application precedes the

stated NCBI date. For example, as discussed above in the section entitled "Priority", SEQ ID NO: 5272 of the instant application is identical to SEQ ID NO: 22273 of U.S. Application No. 60/139,932, filed June 21, 1999, from base pairs 2012 through 3941 of SEQ ID NO: 5272. As such, Applicants are entitled to a priority date of at least June 21, 1999 or earlier. Accordingly, AP000604 (NCBI website October 15, 1999) could not have been known or used before invention by applicants. 35 U.S.C. § 102(a).

Based on the foregoing, Applicants respectfully submit that GenBank Accession Number AP000604 cannot be anticipatory.

Likewise with respect to the Brennan reference (U.S. Patent No. 5,474,796), Applicants, in their November 13 Response, stated that "[o]ne of ordinary skill in the art would not consider a sequence of 10 nucleotides as identical to, for example, SEQ ID NO: 5272, or its complement, both of which are 3941 bases in length." *See* Applicants' November 13, 2007 Response. What was meant by such a statement was that one of ordinary skill in the art would not consider a sequence of 10 nucleotides as identical to, for example, SEQ ID NO: 5272 or its complete complement that is 100% identical over the full length of SEQ ID NO: 5272.

The presently pending claims recite a nucleic acid comprising from about 30 to 300 base pairs of SEQ ID NO: 5272 or complements. Whatever else Brennan may teach or suggest, it does not teach or suggest a nucleic acid comprising from about 30 to 300 nucleotide residues of SEQ ID NO: 5272 or complements, *i.e.*, Brennan does not teach or suggest a nucleic acid comprising at least about 30 nucleotide residues. As such, Applicants respectfully submit that the presently pending claims are not anticipated by Brennan.

Based on the foregoing, Applicants request withdrawal of the remaining rejections under 35 U.S.C § 102, Anticipation.

**IV. CONCLUSION**

In view of the foregoing amendments and remarks, Applicants respectfully submit that the present application is now in condition for allowance, and respectfully request notice of such. The Examiner is encouraged to contact the undersigned at 202-942-5325 if any additional information is necessary for allowance.

Respectfully submitted,



Date: January 3, 2008

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# ATTACHMENT A

SEQ ID NO: 5272  
CCTCCAATGAAATATATCCTGCAATTGTCACATTGAGTGTGGAGTGGATAAGTAATAAGAGACAAA  
70  
SEQ ID NO: 22273 -----  
----- 0

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Consensus .....  
..... 70

SEQ ID NO: 5272  
CAATCATCCCACAAGTATTGGAACCTGAAAGCTTGAACAAACCTTATGTTCTGCATTCTA  
140  
SEQ ID NO: 22273 -----  
----- 0

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Consensus .....  
..... 140

SEQ ID NO: 5272  
AAATAGTAAAGTTCCCCATTGCTCTGAAGGCCGTGCGGGTGCCTTGNNNNNNNNNNNNNNNNNN  
210  
SEQ ID NO: 22273 -----  
----- 0

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Consensus .....  
..... 210

SEQ ID NO: 5272  
NNNNNNATCAATCCACAAACAGAGATATTACGAGCCATTACTCAGACATACAGATGTTGGCTGGTGAGA  
280  
SEQ ID NO: 22273 -----  
----- 0

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Consensus .....  
..... 280

SEQ ID NO: 5272  
TTCATGCATCGACAACCATAGATTGAAAAGGAAAAATGTAACTAGACACCCACCTGTCATCCTCTGACA  
350  
SEQ ID NO: 22273 -----  
----- 0

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Consensus .....  
..... 350

SEQ ID NO: 5272  
ATGGGTACACATCACCAAATAATGTCACTCTGCATTCGATAAGCCACTCCATCGGGTATCTGCCAGCC  
420  
SEQ ID NO: 22273 -----  
----- 0

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Consensus ..... 420  
-----

SEQ ID NO: 5272  
AAATCACCGGTTACATAACATAAAGGGTAAACCTTTGCTGTATAATTAAACACAATAGCCAATGTTA  
490  
SEQ ID NO: 22273 -----  
----- 0

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Consensus ..... 490  
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SEQ ID NO: 5272  
CCCTGAAACAACAAAGGCTGCATCTAGGTTCAAGAGATTTCGTGTGGATGCCAGCGGTGAAAACAA  
560  
SEQ ID NO: 22273 -----  
----- 0

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Consensus ..... 560  
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SEQ ID NO: 5272  
AAATATTGGATCTGATAAGAAAAAGTAGAAGCAATTCAAGAAATGAGCATCTATTATATCTCAACCAGTA  
630  
SEQ ID NO: 22273 -----  
----- 0

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Consensus ..... 630  
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SEQ ID NO: 5272  
GACTCAAACATTAATTGTACCATTTATAATTGGTATTGCCCTCAATAACACAGACACAAAAACACTCCTA  
700  
SEQ ID NO: 22273 -----  
----- 0

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Consensus ..... 700  
-----

SEQ ID NO: 5272  
CATGTACACCTCTAATGAAATTAAAGGAAAAGAGGGAAAAACCGCTTGACTTCACTTCTACTATTGCG  
770  
SEQ ID NO: 22273 -----  
----- 0

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Consensus ..... 770  
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SEQ ID NO: 5272  
TTCCCACAAAAATCAAATCAAGTTAAGTTTACAGTTAGAGGAGTTATGACTAAGAACCAATTGTCGAC  
840

SEQ ID NO: 22273 ----- 0

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Consensus ..... 840

SEQ ID NO: 5272  
TGGCAAATAATTAAACATCTACTCTGAGAAAAATTGAGCGTGCAACAAAAGAAGACACTGTAGAACTAG  
910

SEQ ID NO: 22273 ----- 0

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Consensus ..... 910

SEQ ID NO: 5272  
GAGCAGTCACAAAGAACAGATAGACTCAGTGACTTACGCCCATCCGATCAGGTGCAAAATCTACCAATG  
980

SEQ ID NO: 22273 ----- 0

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Consensus ..... 980

SEQ ID NO: 5272  
AGCCAAATGGGTACCCTTCCCCTGCGGTGGTGCATTTGGACATCACTGTGCACAGATGAGCAAACCTAGC  
1050

SEQ ID NO: 22273 ----- 0

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Consensus ..... 1050

SEQ ID NO: 5272  
CTTGAATCATAAAAACACAACAGACAAGACAGATAAAGAACCTAAATAATCTTTCTCATTGAAGTAAA  
1120

SEQ ID NO: 22273 ----- 0

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Consensus ..... 1120

SEQ ID NO: 5272  
AAGGAAGAATACAACCATCTAAAGGACAAACCCCTTTACCTGTTCCAACAAGTCCGTACAGCTAAAGC  
1190

SEQ ID NO: 22273 ----- 0

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Consensus ..... 1190

SEQ ID NO: 5272  
AGCCGAGGTAAAGCATGAGCTGATGTAGCATTGAAACACCAGATATTGGAGTTCTAAAAGCCCA  
1260  
SEQ ID NO: 22273 -----  
----- 0

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Consensus ..... 1260

SEQ ID NO: 5272  
GCTCGATTTCCTCCACACCCCTGAGGATGTGCAAGAGATGCCTCCACATCGATTACACTATGAGAAGTT  
1330  
SEQ ID NO: 22273 -----  
----- 0

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Consensus ..... 1330

SEQ ID NO: 5272  
CACCATTGCTATTACTCCCGAGCTTCCCTCACACAACATTACAAGCTATTAATCTCTATGTCAAAGCA  
1400  
SEQ ID NO: 22273 -----  
----- 0

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Consensus ..... 1400

SEQ ID NO: 5272  
AACCATTACGTGGTATCATCTTCCGCTAATCTAAGATTGATTCTACACAAACTCTGCATCAAAACCAA  
1470  
SEQ ID NO: 22273 -----  
----- 0

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Consensus ..... 1470

SEQ ID NO: 5272  
AGTTTTGTGTCCAAAATTGTAATCTTTGCTGAATTGGCATACCCAAAAACAAAAGTTATAATCTTAG  
1540  
SEQ ID NO: 22273 -----  
----- 0

---

Consensus ..... 1540

SEQ ID NO: 5272  
TTGAATTATTATTCATCACAAAGACAAGAGAAAAAGTACCTGTGATAAGAGAAGATATCCCCAGGAAAAAA  
1610  
SEQ ID NO: 22273 -----  
----- 0

---

Consensus ..... 1610  
.....

SEQ ID NO: 5272  
CCAAACCCATTATTATCTTCACCTTCACTGGCGTCTCGTTACGTAAGAGAGCTTGATAACGAAGCCGT  
1680  
SEQ ID NO: 22273 -----  
----- 0

---

Consensus ..... 1680  
.....

SEQ ID NO: 5272  
GACTTGATCCATTACTGAGTCTCAGCTTCGGAAATTGCGTTGGTAGCGAATTACAAAACCAACACGA  
1750  
SEQ ID NO: 22273 -----  
----- 0

---

Consensus ..... 1750  
.....

SEQ ID NO: 5272  
AGACTGGGATGAAGTGGGCAGCGGAGATTGAGGGAGAGGCTTAGTCTGTAATTGGGTGTGTGAA  
1820  
SEQ ID NO: 22273 -----  
----- 0

---

Consensus ..... 1820  
.....

SEQ ID NO: 5272  
GTGAAGAGAGCTTCCATGGTGGATGAGAATAAGATTGGGTGAAGAGTCTCTGATCTTCACTATGGC  
1890  
SEQ ID NO: 22273 -----  
----- 0

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Consensus ..... 1890  
.....

SEQ ID NO: 5272  
AGATGCTTCAGGCGTCTTGTGAAAGTAGCTTTAGGAATTAGGACTTTCCAGAGTAGGGTTGTATAA  
1960  
SEQ ID NO: 22273 -----  
----- 0

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Consensus ..... 1960  
.....

SEQ ID NO: 5272  
CACACACATACATATAAAGGGTTTTCTTTTCTTTGGCTTTTTTATA[REDACTED]C[REDACTED]TT  
2030



SEQ ID NO: 5272  
[REDACTED] c  
2380  
SEQ ID NO: 22273  
[REDACTED] c  
369

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Consensus  
AAAGAAATATCTATCATCTAATTGGTCAGACCATTTTAATTACGTTAAAAAGAAAAGATCAAACAGA  
2380

SEQ ID NO: 5272  
[REDACTED] c  
2450  
SEQ ID NO: 22273  
[REDACTED] c  
439

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Consensus  
TCAATGCGACAAACTATAATTAAAGGCACTAAACACTAAATGTCTTAATTGCATAATGCGGGACCCATGT  
2450

SEQ ID NO: 5272  
[REDACTED] c  
2520  
SEQ ID NO: 22273  
[REDACTED] c  
509

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Consensus  
CAATAATTTCTCAAACGTTGTTTCAAGCCCATCCTCTCCGAATCCACGCCAACCGTCTAAGC  
2520

SEQ ID NO: 5272  
[REDACTED] c  
2590  
SEQ ID NO: 22273  
[REDACTED] c  
579

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Consensus  
TGCTGGGTCAATTGCACGGCCAAATTCTTCAACCGCTCGAATCATCCCAGCTGAAACTCCAGTCACAT  
2590

SEQ ID NO: 5272  
[REDACTED] c  
2660  
SEQ ID NO: 22273  
[REDACTED] c  
649

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**Consensus**

CCTCTACTTTCTTAAATTCTGCCCCGGCGTGTGTTCTTAACGCCGAACCAAAACGCCCGCCTAAGAA  
2660

SEQ ID NO: 5272

[REDACTED]

2730

SEQ ID NO: 22273

[REDACTED]

719

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**Consensus**

CACTCTTTCGTCGCTCTTGCGCTGCTCCACAGCCAAGCCAAAGACGCCATATGAAACGACAGCGTT  
2730

SEQ ID NO: 5272

[REDACTED]

2800

SEQ ID NO: 22273

[REDACTED]

789

---

**Consensus**

GTTAAAATCCCTGTTTAGCTTAACCTTAACCAATTACAAAAATGCCATCGCCACCGTAACCGCAA  
2800

SEQ ID NO: 5272

[REDACTED]

2870

SEQ ID NO: 22273

[REDACTED]

859

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**Consensus**

CGGCCTTGGCATTCACTCTGTTTCCCTCCCTGGCGCTCTGTTACGTCACGGCTCGTTGACGATAGCTC  
2870

SEQ ID NO: 5272

[REDACTED]

2940

SEQ ID NO: 22273

[REDACTED]

929

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**Consensus**

GGAGCTTGAGACACAGTCAGAACAGACAGAACAGAACAGAACAGACGATTCCTGAAACAACATGTTGTTCGT  
2940

SEQ ID NO: 5272

[REDACTED]

3010

SEQ ID NO: 22273

[REDACTED] c c [REDACTED] G A G A G A T T C A T S C V [REDACTED] c  
999

---

Consensus

G G A G G C C A A G G A A G A A G A G G G A C C A G A A A C G A A T T T G A C T A A G A G A T T G C A A T T T G G G C A A T G A C A C  
3010

SEQ ID NO: 5272

[REDACTED] c c [REDACTED] c c c c c c c c c c c c c c c c c c c  
3080

SEQ ID NO: 22273

[REDACTED] c c [REDACTED] c c c c c c c c c c c c c c c c c  
1069

---

Consensus

G G C G G A A T C A C G A C C G G A A G A G A A A T T T G A G G C A T G G A A C T T A G C G T C A C A A G A A C G G C A G A G G A A G G C  
3080

SEQ ID NO: 5272

[REDACTED] c  
3150

SEQ ID NO: 22273

[REDACTED] c  
1139

---

Consensus

A G A G T C G G C A C A T T G G A G A T O A G C T T P Y G G C A C C A A A G C T C G C A A A A G C T C A C C A T T G A G T C G A T O  
3150

SEQ ID NO: 5272

[REDACTED] c  
3220

SEQ ID NO: 22273

[REDACTED] c  
1209

---

Consensus

T C T C T G G A T C A C Y A G A A A G A A G T G A G A G A A T T G G T T T G - A A T G A T G A T G G T G G G A A G A G A G A T T A A G  
3220

SEQ ID NO: 5272

[REDACTED] c  
3290

SEQ ID NO: 22273

[REDACTED] c  
1279

---

Consensus

C A A G A C A G C T A A A T G A T T C A / G G G A G A G A A A G A C C G T G G A G T T T T A T G G T T C A T G G T T G A T G A G A G T A G  
3290

SEQ ID NO: 5272

[REDACTED]

3360

SEQ ID NO: 22273

[REDACTED]

1349

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**Consensus**

TGTTTCAGTTCACACATGAAATTACATGAGCCATAATTTTACGGAAATGAAATGAATGG

3360

SEQ ID NO: 5272

[REDACTED]

3430

SEQ ID NO: 22273

[REDACTED]

1419

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**Consensus**

TCTTTCAGAATTGGAGAGAATGACGTGTTGAGGTTTGAGGCTGGTGAGATTATGCGTCATTTTA

3430

SEQ ID NO: 5272

[REDACTED]

3500

SEQ ID NO: 22273

[REDACTED]

1489

---

**Consensus**

AAACTATTACACTAGCCGCCAACGCAATTGCTCTTCCTTTGGTGTGACGTGGAGATTAGTCACACTAA

3500

SEQ ID NO: 5272

[REDACTED]

3570

SEQ ID NO: 22273

[REDACTED]

1559

---

**Consensus**

TGTTTCAGAGACTTGGTCTTATTCAAATTGCTTCTTCTTTCTTGGTTGCTTCATTACATT

3570

SEQ ID NO: 5272

[REDACTED]

3640

SEQ ID NO: 22273

[REDACTED]

1629

---

**Consensus**CTTCTGATTTGCAGCTTTAATATAAACTTTATACATTGATCTTTGTCGAATACAAAACAGAAGA  
3640

SEQ ID NO: 5272

[REDACTED]

3710

SEQ ID NO: 22273

[REDACTED]

1699

---

**Consensus**TAATACCTTAAATTATAATCTAAGTACTAAGGATACAAAACACAAGGTGAAACTGTGGTGAACCTGTT  
3710

SEQ ID NO: 5272

[REDACTED]

3780

SEQ ID NO: 22273

[REDACTED]

1769

---

**Consensus**TGGGTTCTGATCCGAAGTAGTACACAACTAGTCTATATCTTGAAATCTTCCAAAAATGGTTCTTAAAT  
3780

SEQ ID NO: 5272

[REDACTED]

3850

SEQ ID NO: 22273

[REDACTED]

1839

---

**Consensus**AAAATCTCTTTGAATAACCAATCTAACATCCATAC/TCTGTTAACATATCCATAGGCCCTCCTAC  
3850

SEQ ID NO: 5272

[REDACTED]

3920

SEQ ID NO: 22273

[REDACTED]

1909

---

**Consensus**GAATCAACTTGAGACCTCTCAAGAGAGTTTACTTCTPTGATCCGACCATAATGCGCTCTGGCGTATTG  
3920

SEQ ID NO: 5272

[REDACTED] 3941

SEQ ID NO: 22273

[REDACTED] 1930

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**Consensus**

[REDACTED] 3941

# ATTACHMENT B

SEQ ID NO: 5272  
CCTCCAATGAAATATATACTGCAATTGTACATTGAGTGTGGAGTGGATAAGTAATAAGAGACAAA  
70  
SEQ ID NO: 42735 ----- 0

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Consensus ..... 70  
..... 70

SEQ ID NO: 5272  
CAATCATCCCACAAGTATTGGAACCTGGAAAGGCACAAGTTGAAACAAACCTTATGTTCTGCATTCTA  
140  
SEQ ID NO: 42735 ----- 0

---

Consensus ..... 140  
..... 140

SEQ ID NO: 5272  
AAATAGTAAAGTTTCCCCATTGCTCTGAAGGCCGTGCGGGTGCTTGNNNNNNNNNNNNNNNNNNNN  
210  
SEQ ID NO: 42735 ----- 0

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Consensus ..... 210  
..... 210

SEQ ID NO: 5272  
NNNNNNATCAATCACAAACAGAGATATTACGAGCCATTACTCAGACATACAGATGTTGGCTGGTGAGA  
280  
SEQ ID NO: 42735 ----- 0

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Consensus ..... 280  
..... 280

SEQ ID NO: 5272  
TTCATGCATCGACAACCATAGATTGAAAAGGAAAATGTAACTAGACACCCACCTGTCATCCTCTGACA  
350  
SEQ ID NO: 42735 ----- 0

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Consensus ..... 350  
..... 350

SEQ ID NO: 5272  
ATGGGTACACATCACCAAATAATGTCACTCTGCATTGATAAGCCACTCCATCGGGTATCTGCCAGCC  
420  
SEQ ID NO: 42735 ----- 0

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Consensus ..... 420

SEQ ID NO: 5272  
AAATCACCGTTACATAAACATAAAGGGTAAACCTTTGCTCGTATAATTAAACACAATAGCCAATGTTA  
490

SEQ ID NO: 42735 ----- 0

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Consensus ..... 490

SEQ ID NO: 5272  
CCTGAACAACAAGGCTGCATCTAGGTTCAAGAGATTCGTGTGGATGCCAGCGGTGAAAACAA  
560

SEQ ID NO: 42735 ----- 0

---

Consensus ..... 560

SEQ ID NO: 5272  
AAATATTGGATCTGATAAGAAAAAGTAGAAGCAATTCAAGAAATGAGCATCTATTATATCTCAACCAGTA  
630

SEQ ID NO: 42735 ----- 0

---

Consensus ..... 630

SEQ ID NO: 5272  
GACTCAAACATTAATTGTACCCATTATAATTGGTATTGCCCTCAATACACAGACACAAAAACACTCCTA  
700

SEQ ID NO: 42735 ----- 0

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Consensus ..... 700

SEQ ID NO: 5272  
CATGTACACCTCTAATGAAATTAAAGGAAAAGAGGGAAAAACCGCTTGACTTCACCTCCTACTATTGCG  
770

SEQ ID NO: 42735 ----- 0

---

Consensus ..... 770

SEQ ID NO: 5272  
TTCCCACAAAAATCAAATCAAGTTAAGTTTACAGTTAGAGGAGTTATGACTAAGAACCAATTGTCGAC  
840

SEQ ID NO: 42735 -----  
----- 0

---

Consensus ..... 840

SEQ ID NO: 5272  
TGGCAAATAATTAAACTCATACTCTGAGAAAAATTGAGCGTGCAACAAAAGAAGACACTGTAGAACTAG  
910  
SEQ ID NO: 42735 -----  
----- 0

---

Consensus ..... 910

SEQ ID NO: 5272  
GAGCAGTCACAAAGAAAGATAGACTCAGTGACTTACGCCCATCCGATCAGGTGCAAAATCTACCAATG  
980  
SEQ ID NO: 42735 -----  
----- 0

---

Consensus ..... 980

SEQ ID NO: 5272  
AGCCAAATGGGTACCCCTCCCTGCGGTGGTGCATTTGGACATCACTGTGCACAGATGAGCAAACCTAGC  
1050  
SEQ ID NO: 42735 -----  
----- 0

---

Consensus ..... 1050

SEQ ID NO: 5272  
CTTGAATCATAAAAACACAACAAGACAAGACAGATAAAGAACCTAAATAATCTTTCTCATTGAAGTAAA  
1120  
SEQ ID NO: 42735 -----  
----- 0

---

Consensus ..... 1120

SEQ ID NO: 5272  
AAGGAAGAATACAACCATCTAAAGGACAAACCCCTTTACCTGTTCCAACAAGTCCGTACAGCTAAAGC  
1190  
SEQ ID NO: 42735 -----  
----- 0

---

Consensus ..... 1190

SEQ ID NO: 5272  
AGGCCGAGGTAAAGCATGAGCTGATGTAGCATTTGAACACCACAGATATTGGAGTTCTAAAAGCCCA  
1260  
SEQ ID NO: 42735 -----  
----- 0

---

Consensus ..... 1260

SEQ ID NO: 5272  
GCTCGATTCCTCCACCCCTGAGGATGTGCAAGAGATGCCCTCACATCGATTACACTATGAGAAGTT  
1330  
SEQ ID NO: 42735 -----  
----- 0

---

Consensus ..... 1330

SEQ ID NO: 5272  
CACCATGCTATTACTCCCGAGCTTCCCTCACACAACATTACAAGCTATTAATCTCTATGTCAAAGCA  
1400  
SEQ ID NO: 42735 -----  
----- 0

---

Consensus ..... 1400

SEQ ID NO: 5272  
AACCATTACGTGGTATCATCTTCCGCTAATCTAAGATTGATTCTACACAAACTCTGCATCAAAACAA  
1470  
SEQ ID NO: 42735 -----  
----- 0

---

Consensus ..... 1470

SEQ ID NO: 5272  
AGTTTTGTGTCAAAATTGTAATCTTTGCTGAATTTCGATACACAAAAACAAAAGTTATACTTTAG  
1540  
SEQ ID NO: 42735 -----  
----- 0

---

Consensus ..... 1540

SEQ ID NO: 5272  
TTGAATTATTATTCATCACAGACAAGAGAAAAAGTACCTGTGATAAGAGAAGATATCCCCAGGAAAAAA  
1610  
SEQ ID NO: 42735 -----  
----- 0

---

Consensus .....  
..... 1610

SEQ ID NO: 5272  
CCAAACCCATTATTATCTTCACCTCACTGGCGTCTCGTTACGTAAGAGAGCTTGTATACGAAGCCGT  
1680  
SEQ ID NO: 42735 -----  
----- 0

---

Consensus .....  
..... 1680

SEQ ID NO: 5272  
GACTTGATCCATTACTGAGTCTCAGCTTCGGGAATTGCGTTGGTAGCGAATTACAAAACCAACACGA  
1750  
SEQ ID NO: 42735 -----  
----- 0

---

Consensus .....  
..... 1750

SEQ ID NO: 5272  
AGACTGGGATGAAGTGGGCAGCGGAGATTGAGGAGAGGCTTAGTCTGTAATTGGGTGTGTGTTGAA  
1820  
SEQ ID NO: 42735 -----  
----- 0

---

Consensus .....  
..... 1820

SEQ ID NO: 5272  
GTGAAGAGAGCTTCCATGGTGGATGAGAATAAGATTGGGTGAAGAGTCTCTGATCTTCACTATGGC  
1890  
SEQ ID NO: 42735 -----  
----- 0

---

Consensus .....  
..... 1890

SEQ ID NO: 5272  
AGATGCTTCAGGCGTCTTGTGAAAGTAGCTTAGGAATTAGGACTTTCCAGAGTAGGGTTGTATAA  
1960  
SEQ ID NO: 42735 -----  
----- 0

---

Consensus .....  
..... 1960

SEQ ID NO: 5272  
CACACACATACATATAAGGGTTTTCTTTCTTTGGCTTTTTTATA [REDACTED] C [REDACTED] C TTT  
2030

SEQ ID NO: 42735 -----  
GTCAGCTC CCGG 19

**Consensus** ..... GTT  
GGATTCGATTACT .. 2030

SEQ ID NO: 5272  
[REDACTED] C [REDACTED] C [REDACTED] C [REDACTED] C [REDACTED] C [REDACTED] C  
2100  
SEQ ID NO: 42735  
[REDACTED] C [REDACTED] C [REDACTED] C [REDACTED] C [REDACTED] C [REDACTED] C  
89

**Consensus**  
TGTGCTTTGGAAATTACTTTGATGATTTCATTCCTTTGTTTGATGTTGATAATAACGAA  
**2100**

SEQ ID NO: 5272  
CC [REDACTED] G [REDACTED] C [REDACTED] C [REDACTED] C [REDACTED] C [REDACTED]  
2170  
SEQ ID NO: 42735  
CC [REDACTED] TG [REDACTED] C [REDACTED] C [REDACTED] C [REDACTED] C [REDACTED]  
159

**Consensus**  
T<sup>1</sup>T<sup>2</sup>C<sup>3</sup>G<sup>4</sup>T<sup>5</sup> . . AATAAGAAAATG<sup>6</sup>T<sup>7</sup>T<sup>8</sup>T<sup>9</sup>A<sup>10</sup>A<sup>11</sup>T<sup>12</sup>A<sup>13</sup>T<sup>14</sup>T<sup>15</sup>G<sup>16</sup>A<sup>17</sup>A<sup>18</sup>A<sup>19</sup>T<sup>20</sup>T<sup>21</sup>T<sup>22</sup>A<sup>23</sup>

SEQ ID NO: 5272  
2240  
SEQ ID NO: 42735  
229

**Consensus**  
AGAAATTTATCCTTGTTTAAAGAAATTGCGAAGAGAAAGATTCTCATCTCAAAAAGAACCTGATAAT  
2240

**Consensus**  
GCTATGGATACCAATTATCGTTCTAAATCTTACTGTGAGTAAAAAAATTAAATCTCCCT  
2310

SEQ ID NO: 5272

[REDACTED]

2380

SEQ ID NO: 42735

[REDACTED]

369

---

Consensus

AAAGAAATATCTATCATCTCAATTGTTAGACCATTTAATTACGTTAAAAGAAAGATCAAACAGA

2380

SEQ ID NO: 5272

[REDACTED]

2450

SEQ ID NO: 42735

[REDACTED]

439

---

Consensus

TCAATTCACAAACTATAATTAAAGKTAATAACACTAAATGTCTAATTTCATAATGCCGGACCCATGT

2450

SEQ ID NO: 5272

[REDACTED]

2520

SEQ ID NO: 42735

[REDACTED]

509

---

Consensus

CAATAATATTCTCAAACGTTGTCCTTTCAGCCCCATCCTTCCTCGAATTCACGGGCCACCGTCTAACG

2520

SEQ ID NO: 5272

[REDACTED]

2590

SEQ ID NO: 42735

[REDACTED]

579

---

Consensus

TGTTGCGTCATTGGACGGGCCAATTGTTGTTGAAACGGCTCGAATTCATCCAGCTGAAACTCCAGTCACAT

2590

SEQ ID NO: 5272

[REDACTED]

2660

SEQ ID NO: 42735

[REDACTED]

649

---

**Consensus**CTTCTAATTCTTAAATTCTGCAACCTCGTCGTCTTAACGCCAACCAAAACGCCGCCGCTAAGAA  
2660

SEQ ID NO: 5272

c c

2730

SEQ ID NO: 42735

c c

719

---

**Consensus**CACTCTTCTGTCGCTCTGGCCCTGGCTCCACAGCCAAGCCAAAGACGCATATGAAACGACAGCGTT  
2730

SEQ ID NO: 5272

ccc c

2800

SEQ ID NO: 42735

ccc c

789

---

**Consensus**GTTAAAATCCCTTTAGCTAAATTACACACCAATTACAAAAATGCCATCGCCACCGTAACCGCAA  
2800

SEQ ID NO: 5272

c c

2870

SEQ ID NO: 42735

c c

859

---

**Consensus**CGGCCTTGCGATTCACTCGTCTTCCCTCGCGCTCTGTTACGTCAGCCTCGTTGACGATAGCTC  
2870

SEQ ID NO: 5272

c c

2940

SEQ ID NO: 42735

c c

929

---

**Consensus**GGAGCTTGAGACACACTCAAGAAGCAGCAGCAAGAAGAAGACGACGATTCTGAACAAATGTTGTTGCT  
2940

SEQ ID NO: 5272

cc c

3010

SEQ ID NO: 42735

[REDACTED] CC [REDACTED] C [REDACTED] C [REDACTED] C [REDACTED] C [REDACTED] C  
999

---

Consensus

G[REDACTED]AAGGCCAAGGAA[GAGACNA]C[A][AAAGAAATTTGAGTAAGAGATTTGCAATTGGGAAATGACAC  
3010

SEQ ID NO: 5272

[REDACTED] C  
3080

SEQ ID NO: 42735

[REDACTED] C  
1069

---

Consensus

GCGGAAATGACGACCCAAAGACAAATT[GAGCATGGAACTTAGCGTCACAAGAACGGCAGAGGAAGGC  
3080

SEQ ID NO: 5272

[REDACTED] C  
3150

SEQ ID NO: 42735

[REDACTED] C  
1139

---

Consensus

A[GAGTCGK]CACAATGGGAGATAGTT[GACACAAA[GCTCGCAAAGCTACCATTGAGTCGATO  
3150

SEQ ID NO: 5272

[REDACTED] C [REDACTED] C [REDACTED] G [REDACTED] C [REDACTED] C [REDACTED] C  
3220

SEQ ID NO: 42735

[REDACTED] C [REDACTED] C [REDACTED] G A [REDACTED] C [REDACTED] C  
1209

---

Consensus

TATCT[GATACCAGAAAAGTCAAGACAATTGGTTTG-AATGATGATGTTGGGAAGAGAGATTTAAG  
3220

SEQ ID NO: 5272

[REDACTED] C [REDACTED] C [REDACTED] C [REDACTED] C [REDACTED] C [REDACTED] C  
3290

SEQ ID NO: 42735

[REDACTED] C [REDACTED] C [REDACTED] C [REDACTED] C [REDACTED] C [REDACTED] C  
1279

---

Consensus

GAAGACATTTAAATGATGAGCTCAAGAGAAAGAGGCGCTTGAGCTTTATGGTTCA[GTTGATGAGAGTAG  
3290

SEQ ID NO: 5272

[c][c][c][c][c][c][c][c][c][c][c] [REDACTED]

3360

SEQ ID NO: 42735

[c][c][c][c][c][c][c][c][c][c] [REDACTED]

1349

---

**Consensus**

TCTCTTCAAGTTACACATCAAAAGAACATTACATGAGCCATAATTTCAGGGAAATGAATG

3360

SEQ ID NO: 5272

[c][c][c][c][c][c][c][c][c][c] [REDACTED]

3430

SEQ ID NO: 42735

[c][c][c][c][c][c][c][c][c][c] [REDACTED]

1419

---

**Consensus**

TGTTCGTAATTGGAGAGAAATGAAATGTTCTTGAGGTTTGAGCCTGGTGAGATTATGTCCTCATTTA

3430

SEQ ID NO: 5272

[c][c][c][c][c][c][c][c][c][c] [REDACTED]

3500

SEQ ID NO: 42735

[c][c][c][c][c][c][c][c][c][c] [REDACTED]

1489

---

**Consensus**

AAACTATTAACATAGCCGCCAACGCAATTGGCTTCTCTTGGTGTGACCTGGAGATTAGTCAACACTAA

3500

SEQ ID NO: 5272

[c][c][c][c][c][c][c][c][c][c] [REDACTED]

3570

SEQ ID NO: 42735

[c][c][c][c][c][c][c][c][c][c] [REDACTED]

1559

---

**Consensus**

TGCTTTCTAGAGACTTGGCTTATTGCAAATGCTTCTCTCTTTCTTGGTTGCTTCATTACATTT

3570

SEQ ID NO: 5272

[c][c][c][c][c][c][c][c][c][c] [REDACTED]

3640

SEQ ID NO: 42735

[c][c][c][c][c][c][c][c][c][c] [REDACTED]

1629

---

**Consensus**

CCTCTGCATTGTTGCAGTC~~TTTATATAAACTTTATACATTGATCTTGT~~CGAATACAAAACAGAAGA  
3640

SEQ ID NO: 5272

[REDACTED]

3710

SEQ ID NO: 42735

[REDACTED]

1699

---

**Consensus**

TAATACTCTAAATTATAATTAAAGGACTAAGGATACAAAACACAAGGTGTAAACTGTGGTGAACCTGTT

3710

SEQ ID NO: 5272

[REDACTED]

3780

SEQ ID NO: 42735

[REDACTED]

1769

---

**Consensus**

TGGGTTTGATCCGAACCTAGTAA~~AAATAGTCTATATCTTGAATCTTCCAAAAATGTTTCTTAAAT~~

3780

SEQ ID NO: 5272

[REDACTED]

3850

SEQ ID NO: 42735

[REDACTED]

1839

---

**Consensus**

AAAATGGCTT~~TGAAATAGCCTTAAATCCAATAGTGTGTTAAGATATATCATAGAGCCCCCTCTA~~O  
3850

SEQ ID NO: 5272

[REDACTED]

3920

SEQ ID NO: 42735

[REDACTED]

1909

---

**Consensus**

GAATCA~~ACATNAGACCTCTCCAGAGACUTTACTTGTITGTTATCCGACCATAATGCCTCTGGCGTATTC~~  
3920

SEQ ID NO: 5272 [REDACTED] 3941

SEQ ID NO: 42735 [REDACTED] 1930

---

**Consensus**

TAATACTCGGNTTGTAGCA 3941

# ATTACHMENT C

SEQ ID NO: 5272  
CC [REDACTED] c c c c c [REDACTED] c [REDACTED]  
70  
SEQ ID NO: 9911  
CC [REDACTED] c c c c c [REDACTED] c [REDACTED]  
70

---

Consensus  
CCTCCAATGAAATATATATCACTGCCAATGTCACATTGAGTGTGGAGTGGATAAGTAATAAGAGACAAA  
70

SEQ ID NO: 5272  
c c c c c [REDACTED] c [REDACTED] c c c c c c c c c [REDACTED]  
140  
SEQ ID NO: 9911  
c c c c c [REDACTED] c [REDACTED] c c c c c c c c c [REDACTED]  
140

---

Consensus  
CAACTCATCTAACAGTATTGTAACCTTGAAAGGCACAAGTTTGAAACAAACCTTATGTTCTGCATTCTA  
140

SEQ ID NO: 5272  
[REDACTED] c c c c c [REDACTED] c [REDACTED]  
210  
SEQ ID NO: 9911  
[REDACTED] c c c c c [REDACTED] c [REDACTED]  
210

---

Consensus  
AAATAGTGAAGTTTCCGATTTTCTGAGGCCCCGTGCGGGTGCTTGNNNNNNNNNNNNNNNNNNNNNNN  
210

SEQ ID NO: 5272  
c c c c c c c c c c c c c c c c c [REDACTED]  
280  
SEQ ID NO: 9911  
c c c c c c c c c c c c c c c c c [REDACTED]  
280

---

Consensus  
NNNNNNATCAATCCACAAACCAAGATAATTACAGGCCATTACTCAGACATACAGATTTGGCTGGTGAGA  
280

SEQ ID NO: 5272  
c c c c c c c c c c c c c c c c c [REDACTED]  
350  
SEQ ID NO: 9911  
c c c c c c c c c c c c c c c c c [REDACTED]  
350

---

**Consensus**

TTCATGCATCGACAACCATAGATTGAAAAAAGAAAAATGTAAGACACCCACCTGTTCATCCTCTGACA  
350

SEQ ID NO: 5272

[REDACTED]

420

SEQ ID NO: 9911

[REDACTED]

420

---

**Consensus**

ATGGGTACACATCACCAAAATAATGTCACTCTTGCAATTGATAAGCCACTCCATCCGGTATCTGCCAGCC  
420

SEQ ID NO: 5272

[REDACTED]

490

SEQ ID NO: 9911

[REDACTED]

490

---

**Consensus**

AAATCAACGGTACATAAACATTAATTAACCTTTGCTCGTATAATTAAACACAATAGCCATGTTA  
490

SEQ ID NO: 5272

[REDACTED]

560

SEQ ID NO: 9911

[REDACTED]

560

---

**Consensus**

CCTGAAACAAGGCTGCATCTAGTTGCAAGAGATTCTGTGTGGATGGCAGCGGTGAAAACAA  
560

SEQ ID NO: 5272

[REDACTED]

630

SEQ ID NO: 9911

[REDACTED]

630

---

**Consensus**

AAATATTTCATCTGATAAAAGAAATTCAGATTAGAAATGAGGATCTATTATACTCAACCAGTA  
630

SEQ ID NO: 5272

[REDACTED]

700

SEQ ID NO: 9911

[REDACTED] cc c c [REDACTED] cc c c c c c c c c c c c c c c  
700

---

**Consensus**

[REDACTED] G A C T C A A A A C A T T A A T T G T A C A T T A T A A T T G G T A T T G C C T T C A A T A C A C A G A C A C A A A A A C A C T C C T A  
700

SEQ ID NO: 5272

[REDACTED] C c c c c c [REDACTED] c c c c c c c c c c c c c c  
770

SEQ ID NO: 9911

[REDACTED] C c c c c c [REDACTED] c c c c c c c c c c c c c  
770

---

**Consensus**

[REDACTED] C A T G T A C A C C T C T A A T G A A A T T A A G A A A A G A G O G A A A A A C C G C T T T G A C T T C A S T T C C T A C T A T T C G  
770

SEQ ID NO: 5272

[REDACTED] C c  
840

SEQ ID NO: 9911

[REDACTED] C c c c c c c c c c c c c c c c c c c c  
840

---

**Consensus**

[REDACTED] T T C C C A C A A A A T T A A A T C A A G T T A A G T T T T A C A C T T A G A G G A G T T A T G A C T A A G A A C A A T T G T C A G C  
840

SEQ ID NO: 5272

[REDACTED] C c  
910

SEQ ID NO: 9911

[REDACTED] C c c c c c c c c c c c c c c c c c c c  
910

---

**Consensus**

[REDACTED] T G G C A A A T A A T T A A A T C T C A T A C T C T G A G A A A A A A T T G A G G G T C C A A C A A A A A G A A G A C A C T G T A G A A C T A G  
910

SEQ ID NO: 5272

[REDACTED] C c  
980

SEQ ID NO: 9911

[REDACTED] C c c c c c c c c c c c c c c c c c c c  
980

---

**Consensus**

[REDACTED] G A G C A G T C A A A A A G A A A G A A G A C A T G A C T T A C G C C C A T C C G A T C A G G T G C A A A A T C T A C C A A T G  
980

SEQ ID NO: 5272  
[REDACTED]  
1050  
SEQ ID NO: 9911  
[REDACTED]  
1050

### **Consensus**

AGCCAAATGGGTACCCCTTCCCCGCGTGTTGCATTITGGACATCACTGTGCACAGATGAGCAAACCTAGC  
1050

## Consensus

CTTGAAATCATAAAAACACAAAGACAAACAGATAAACAACTTTAAATCTTCATTGAAGTAA  
1120

SEQ ID NO: 5272  
c ccc c c cccc cc ccc c c c  
1190  
SEQ ID NO: 9911  
c ccc c c cccc cc ccc c c c  
1190

Consensus

**1190** AAGGAAACAATAAACCATCTAAAGGACAAACCCTTTACCTGTTCAACAAGTCCGGACAGCTAAAGC

## Consensus

AGGCCCCAAGCTAAAGCATGAACTTGATGTTAACATTTGAACACCCACAGATATTGGACTTCGAAAAAGGCCA  
1260

SEQ ID NO: 5272  
[REDACTED]  
1330  
SEQ ID NO: 9911  
[REDACTED]  
1330



Consensus

CCAAACGGATTATTATCTTCATTTTGTGGCGCTCGTTACGTAAGAGAGCTTGATACGAAGCCCCGT  
1680

Consensus

GACTTGATCATTACTGAGTCCTAGTTCGGGAATTGCGTTTGGGTAGCGAATTACAAACCAACACGA  
1750

SEQ ID NO: 5272



1820  
SEQ ID NO: 9911  
[REDACTED]  
1820

Consensus

**consensus**  
AGACATTTATGAACTGGGCGAGCTGAGATTTCAGGGAGAGGCTTAGTCTGTAAATTGGGTGTGTGTGAA  
1820

1891  
SEQ ID NO: 9911  
1890

## Consensus

GTGAAAGAGAGCTTCCATGCGGAGTGAAATAAGATTGGGTTCAAGAGACTTCTGATTTCACTATGGC  
**1890**

SEQ ID NO: 5272  
[REDACTED] c c c c c [REDACTED] c cc  
1960

SEQ ID NO: 9911  
[REDACTED] c c c c [REDACTED] c [REDACTED] cc [REDACTED]  
1960

### Consensus

**1960** AGATGTTAGGCTTGTGTTAAATAGTTAATATTAGGACTTTCCAGAGTAGGGTTGTATAA

SEQ ID NO: 5272

[REDACTED]

2030

SEQ ID NO: 9911

[REDACTED]

2030

---

**Consensus**

CACACACATACATAAGGTTTTCCTTTGGTTTTTTTATAGTTGGATTACGATTACTTT

2030

SEQ ID NO: 5272

[REDACTED]

2100

SEQ ID NO: 9911

[REDACTED]

2100

---

**Consensus**

TGTCCTTCGGAATTACTTTTGATGATTCTCTATTCTCTTTGTTTGTTTGATGTTGATAATAACGAA

2100

SEQ ID NO: 5272

[REDACTED]

2170

SEQ ID NO: 9911

[REDACTED]

2170

---

**Consensus**

TTTCCATTGAAATAAAGAAAATTTTTTTAAATTACAAATTTTATTTGATAATAACATAATATTCTA

2170

SEQ ID NO: 5272

[REDACTED]

2240

SEQ ID NO: 9911

[REDACTED]

2240

---

**Consensus**

AGAAATATTTTTTAaaaaaaatTTTTAAAGAGAAAGATTCAATCTCATCTCAAAAGAACCTGATAAT

2240

SEQ ID NO: 5272

[REDACTED]

2310

SEQ ID NO: 9911

[REDACTED]

2310

---





SEQ ID NO: 5272

[REDACTED]

3010

SEQ ID NO: 9911

[REDACTED]

3010

---

**Consensus**

GGAGGCCAAAGAAGAAGAGGAACUAGAAA/GAAATT/TGAGTAAGAGAGTTGCAATTGGGCAAATGACAC

3010

SEQ ID NO: 5272

[REDACTED]

3080

SEQ ID NO: 9911

[REDACTED]

3080

---

**Consensus**

GCGGAAATGACGAGCCAAAGA/AAAATT/GAGGCATGGAACCTAGCGTCACAAGAACGGCAAGGAAGGC

3080

SEQ ID NO: 5272

[REDACTED]

3150

SEQ ID NO: 9911

[REDACTED]

3150

---

**Consensus**

AGAGTCGGCCACAAATGGAGATCAGTCTGGCACACAAAGCTCGAAAAGCTCACCAATTGAGTCGATC

3150

SEQ ID NO: 5272

[REDACTED]

3220

SEQ ID NO: 9911

[REDACTED]

3220

---

**Consensus**

TCTCTGGATCACCGAGAAAGAAGTGAAAGAATTGGTTTGGAAATGATGATGGTGGAAAGAGAGATTAAAG

3220

SEQ ID NO: 5272

[REDACTED]

3290

SEQ ID NO: 9911

[REDACTED]

3290

---

**Consensus**

GAACACATGTAATGATTGA[RE]CAGAGAAAGAGCCGTGGAGTTTATGGTCATGGTGATGAGAGTAG  
3290

SEQ ID NO: 5272

[RE][RE][RE][RE][RE][RE][RE][RE][RE][RE][RE][RE]

3360

SEQ ID NO: 9911

[RE][RE][RE][RE][RE][RE][RE][RE][RE][RE][RE]

3360

---

**Consensus**

TCTCTTCCAAGTTCACACATCAAGAAACTAACAT[GAGCCATAATTTT]AGGGAAATGAATGAAATGG  
3360

SEQ ID NO: 5272

[RE][RE][RE][RE][RE][RE][RE][RE][RE][RE]

3430

SEQ ID NO: 9911

[RE][RE][RE][RE][RE][RE][RE][RE][RE][RE]

3430

---

**Consensus**

TGTTTCTAAGAATTGGAGAGAAATGACGTC[RE]GTA[GGT]TTGAGGCTGGTGAGATTATGTGGTCATTTTA  
3430

SEQ ID NO: 5272

[RE][RE][RE][RE][RE][RE][RE][RE][RE][RE][RE]

3500

SEQ ID NO: 9911

[RE][RE][RE][RE][RE][RE][RE][RE][RE][RE]

3500

---

**Consensus**

AAACTATTAACA[TAGCCGCCAA[RE]]TTT[GACGTC]TTGCTGTGACGTGGAGATTAGTCACACTAA  
3500

SEQ ID NO: 5272

[RE][RE][RE][RE][RE][RE][RE][RE][RE][RE]

3570

SEQ ID NO: 9911

[RE][RE][RE][RE][RE][RE][RE][RE][RE][RE]

3570

---

**Consensus**

TCTCTTTCAGAGACTGGTC[RE]ATT[RE]AAATTCCCTCTTCTTCTTCTGGTGCTTCATTACATT  
3570

SEQ ID NO: 5272

[RE][RE][RE][RE][RE][RE][RE][RE][RE][RE]

3640

SEQ ID NO: 9911

c  
3640

---

Consensus

CTTCGCAATTGGTCAAGGCGTTAAGAACTTTATAACATTGATCTTGTGAATACAAAACAGAAGA

3640

SEQ ID NO: 5272

c  
3710

SEQ ID NO: 9911

c  
3710

---

Consensus

TAATACTTTAAATTATAATCTAAGGATAAGGATACAAAACACAAGGTGTAACCTGTCGGGAACCTGTT

3710

SEQ ID NO: 5272

c  
3780

SEQ ID NO: 9911

c  
3780

---

Consensus

TGGGTTGAGAUCUGAACCTAGTAGAAACAAAGTCTATATCTTGAAATCTTCCAAAAATGGTTCTTAAAT

3780

SEQ ID NO: 5272

c  
3850

SEQ ID NO: 9911

c  
3850

---

Consensus

AAAATGCTTCTTGTAAATGCGWATCTAAATCCAAATAGCTCTGTTAAGATATATCATAGAGCCCCCTCTAC

3850

SEQ ID NO: 5272

c  
3920

SEQ ID NO: 9911

c  
3920

---

Consensus

GAATCCTACTGAGACCTCTCCAGAGCTTGTACCTTCTGCTATCCGACCATAATGCCTGCGGTATTC

3920

SEQ ID NO: 5272 [REDACTED] CC [REDACTED] C [REDACTED] C 3941  
SEQ ID NO: 9911 [REDACTED] CC [REDACTED] C [REDACTED] C 3941

---

Consensus TAAAATGCCGGNNTTCGTAGCA 3941

---